

Approval and Communication of Refinery, Maintenance, or Engineering Instructions

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| Document No.: RI-360 | Title: Richmond Refinery PSM Policy | Current Date: 9/2011 |
| Action: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revision <input type="checkbox"/> Cancellation | | Next Revision Due: 9/2016 |
| Responsible Organization: PSM | | Position to Contact With Questions/Suggestions: PSM Team Lead |
| Summarize Rewritten Material: Deleted from Section 3.8 Hot Work: Richmond Refinery has an established policy and process for managing all changes to process chemicals, technology, equipment, and procedures as required by Cal/OSHA's PSM regulation. RI-370, "Management of Change," details the Richmond Refinery's policy for managing changes described above. | | |
| Review: Minor <input type="checkbox"/> Complete <input checked="" type="checkbox"/> | | |

REQUIRED COMMUNICATION/TRAINING

If Type 2 or Type 3 training is necessary – Instruction Owner is responsible for developing the training material and must work with Development Department Manager and Managers of affected personnel to coordinate training of affected personnel and documentation of training.

| This document should be reviewed by: | Type 1 Simple Change | Type 2 On-The-Job Training | Type 3 Classroom Training |
|--------------------------------------|-------------------------------------|-------------------------------|------------------------------|
| All Refinery Personnel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Operations | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintenance & Reliability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Technical | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| HES | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

APPROVALS

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|---|---|
| Instruction Owner: Karen Draper | Development Manager: <i>(first signature before final routing)</i> Rick Smith |
| Operations Manager: Bruce Chinn | Technical Services Manager: Michelle Johansen |
| HES Manager: Dave Feiglstok | Maintenance & Reliability Manager: Jay Peterson |
| Refinery Manager: <i>(final signature)</i> Mike Coyle | Other Manager: |

On Completion – Instruction Owner will send file and message to IPC to post on the Refinery server.

Necessary Approval for Instructions:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Refinery Instructions: • Safe Work Practices: • Emergency Plans (400 Series RIs): • Engineering Instructions: • Maintenance Instructions: • Cancellation of Instruction: | <ul style="list-style-type: none"> Development, Operations, HES, and Refinery Manager Development, Operations, Maintenance & Reliability, HES, and Refinery Manager Development, Operations, Maintenance & Reliability, HES, and Refinery Manager Technical and HES Manager Maintenance & Reliability and HES Manager Owner and Refinery or Appropriate Dept. Manager |
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RICHMOND REFINERY INSTRUCTIONS

PROCESS SAFETY MANAGEMENT

RICHMOND REFINERY PSM POLICY

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*REVISED: 9/11 (Replaces: 9/06)
Certified as current and accurate: 9/11

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RICHMOND REFINERY INSTRUCTIONS

PROCESS SAFETY MANAGEMENT

RICHMOND REFINERY PSM POLICY

1.0 PURPOSE

The purpose of this Instruction is to communicate Richmond Refinery's policy for complying with all elements of Cal/OSHA's Process Safety Management (PSM) regulation, General Safety Orders, Title 8, Section 5189, and the City of Richmond Industrial Safety Ordinance (RISO) 42-01 interface with the PSM program.

The Cal/OSHA PSM regulation requires facilities to develop and implement systems and programs to prevent and/or minimize the catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Richmond Refinery has incorporated PSM as a major portion of its commitment of maintaining a safe workplace for its employees and as a strategy for preventing process related incidents in the Refinery. The RISO requires that certain PSM programs address Human Factors (which are further described in RI-381, "Human Factors Program)."

2.0 SCOPE

All programs and systems developed as part of Richmond's PSM effort will apply to all operating facilities and employees who are under control of the Refinery General Manager.

The policy for implementing each element of the PSM regulation as described in this Instruction has the following objectives:

- 2.1 Meet the letter and the intent of Cal/OSHA's PSM regulation.
- 2.2 Prevent or mitigate the consequences of process-related incidents that could result in personal injury, damage to equipment and facilities, or impact the surrounding community.
- 2.3 Actively encourage the involvement of employees in the development and implementation of all aspects of PSM so that the concepts of incident prevention are integrated into the performance of daily work in the Refinery.

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3.0 PSM ELEMENTS

3.1 Process Safety Information (PSI)

Richmond Refinery will develop and maintain all PSI required by the PSM regulation and any other information identified as being critical to maintaining plant process safety. This information will be readily available to all employees who need the information to safely operate or maintain the process units. RI-362, "Process Safety Information," describes Richmond Refinery's program for developing and maintaining the required PSI.

3.2 Process Hazards Analysis (PHA)

Richmond Refinery will conduct PHAs on all Refinery facilities/processes as required by the Cal/OSHA PSM regulation.

1. An initial PHA has been conducted on all existing facilities/processes using either the HAZOP or What if/Checklist method.
2. A PHA will be conducted on all new facilities/processes after the revision date of this Refinery Instruction.
3. *It is Richmond Refinery's policy to address issues identified during the PHA that may impact the safety and health of Refinery employees. The final PHA report is available for review by employees upon request. The policy and procedures for conducting PHAs at the Richmond Refinery are detailed in RI-363, "Process Hazards Analysis."

3.3 Operating Manuals/Procedures/Safe Work Practices

It is Richmond Refinery's policy to develop, implement, and maintain operating manuals/procedures that cover all aspects of operations as specified in Cal/OSHA's PSM regulation. RI-102, "Procedures for Instructions, Standards and Manuals," provides details of Richmond Refinery's policy and process for developing and maintaining operating manuals and procedures.

Richmond Refinery has established policies and procedures covering critical nonroutine work as specified in Cal/OSHA's PSM regulation. RI-374, "Safe Work Practices," defines critical safe work practices which are required to address the nonroutine work covered by this element of PSM.

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3.4 Training

Richmond Refinery's policy is to train each employee who operates or maintains a process. Richmond Refinery's training policy and plan for operators are outlined in the Operations Training Guidelines and the Refresher Training Guidelines. Maintenance personnel training is described in RI-368, "Mechanical Integrity" and contractors are addressed in RI-366, "Contractors."

3.5 Contractors

Richmond Refinery will utilize qualified trained contractors who are able to perform high quality work safely and efficiently. Contractor training will include general safety training provided by the approved training program, and training specific to the Richmond Refinery and the work locations. Richmond Refinery's policy for utilizing contractors and contractor training is detailed in RI-366, "Contractors."

3.6 Prestart-up Safety Review (PSSR)

Richmond Refinery will conduct PSSRs for all new or modified facilities and prior to start up of existing facilities after major plant turnarounds. The policy and procedure for conducting PSSRs is detailed in RI-367, "Prestart-up Safety Review."

3.7 Mechanical Integrity

Richmond Refinery will develop and maintain written procedures and systems to ensure the ongoing integrity of all process equipment as required by Cal/OSHA's PSM regulation. RI-368, "Mechanical Integrity," describes Richmond Refinery's policy and standards for meeting this element of PSM.

***3.8 Hot Work**

Richmond Refinery has an established policy and procedure for conducting hot work in the Refinery. RI-341, "Hot Work and General Work Permits," details Richmond Refinery's policy and procedure for controlling hot work within the Refinery.

3.9 Management of Change (MOC)

Richmond Refinery has an established policy and process for managing all changes to process chemicals, technology, equipment, and procedures as required by Cal/OSHA's PSM regulation. RI-370, "Management of Change," details the Richmond Refinery's policy for managing changes described above.

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3.10 Incident Investigation

Richmond Refinery's policy is to promptly report and investigate every incident which results in or could reasonably have resulted in a major accident as required by Cal/OSHA's PSM regulation. The event reporting and incident investigation policy and procedure are detailed in RI-371, "Event Reporting and Incident Investigation."

3.11 Emergency Planning and Response

Richmond Refinery's policy is to develop and maintain emergency response plans for all reasonably expected emergency situations, and to prepare Refinery personnel to respond to those emergencies through communication and training of the emergency procedures, regularly scheduled emergency drills, and assessment of the Refinery's emergency response after all Refinery-wide emergency events.

Richmond Refinery has established policies and procedures for dealing with Refinery emergencies. These policies and procedures are documented in the 400 series of the Richmond Refinery Instructions.

3.12 Injury and Illness Prevention Plan (IIPP), Compliance Audit

Richmond Refinery's Plan is detailed in RI-300, "Injury and Illness Prevention Plan." The IIPP includes all applicable parts of the Cal/OSHA PSM regulation. As part of its IIPP, Richmond Refinery's policy is to conduct a compliance audit of its PSM elements and systems at least every three years and to promptly correct any deficiencies found during the audit. RI-371, "Compliance Audit," details the Refinery's policy and process for conducting the audit.

3.13 Employee Participation, Trade Secrets

It is Richmond Refinery's policy to actively encourage employee participation in the development and implementation of all aspects of Richmond Refinery's PSM effort. RI-361, "Employee Participation Plan," describes Richmond Refinery's policy and plan for obtaining active employee participation. RI-361 also contains the Refinery's policy for the Trade Secrets element of PSM.

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4.0 RICHMOND INDUSTRIAL SAFETY ORDINANCE REQUIREMENTS

4.1 The Ordinance requires that the following PSM programs are part of the Refinery Human Factors Program:

1. Operating Procedures
2. Operator Training
3. Incident Investigation – Major Chemical Accidents or Releases (MCARs) and MCAR near-misses.
4. Process Hazards Analysis